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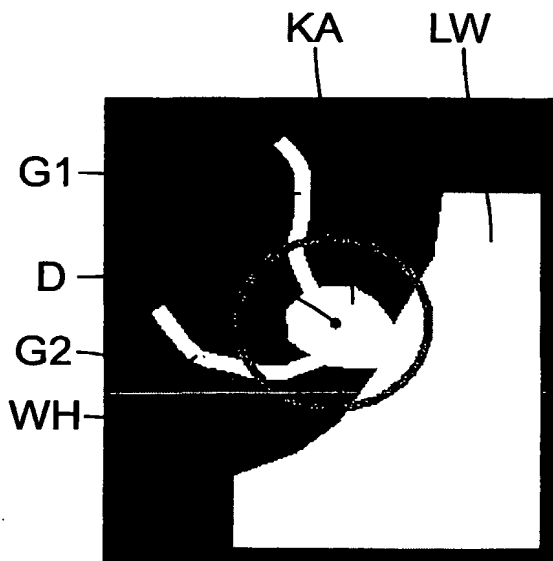
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(54) Title: COMPUTER-AIDED DETECTION OF LUNG NODULES



(57) Abstract: The invention relates to a method and a device for forming an image of body structures from an image data set, notably for highlighting potential nodular structures (KI; KA) in a lung. The problem to be solved by the invention is to achieve automatic highlighting of potential nodular structures in methods of this kind. This is realized in that in a plurality of steps a binary data set is formed in which all pixels present in the image data set are subdivided into pixels to be marked and those not to be marked, a first filtering operation being performed in which for each pixel (D) there is determined a distance value which corresponds to the shortest distance between the pixel and the edge (KAG) of the image structure (KA) in which the pixel is situated, those pixels being selected from the binary data set whose distance value is below a pre-determined distance limit value, there being performed a second filtering operation in which those previously selected pixels remain selected which are directly neighbored by two pixels having a smaller distance value in both directions of at least one straight line which extends through the pixel, there being performed a third filtering operation in which those previously selected pixels remain selected for which the surrounding pixels, being situated at a distance corresponding to the distance value of the pixel, have a distance value which is a pre-

determined distance difference value smaller than the distance value of the pixel to be tested itself, the pixels thus selected being used to form an image in which the selected pixels are highlighted.

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Patent family members are listed in annex.

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ional Application No

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A	<p>CHIOU Y S P ET AL: "Neural-knowledge base object detection in Hybrid Lung Nodule Detection (HLND) system"</p> <p>NEURAL NETWORKS, 1994. IEEE WORLD CONGRESS ON COMPUTATIONAL INTELLIGENCE., 1994 IEEE INTERNATIONAL CONFERENCE ON ORLANDO, FL, USA 27 JUNE-2 JULY 1994, NEW YORK, NY, USA, IEEE, 27 June 1994 (1994-06-27), pages 4180-4185, XP010128047</p> <p>ISBN: 0-7803-1901-X</p> <p>the whole document</p>	1-14
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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